

Electricity from the Air

Chivandire, Tonyaradzwa (School: Queen Elizabeth Girls' High School)

Kamba, Tapiwanashe (School: Queen Elizabeth Girls' High School)

The hypothesis is to use radio waves to produce electricity to power small devices. Ambient radio waves can be converted to alternating current. The project was aimed at using a series of diodes to convert this alternating current to direct current which is used to power simple electronic devices. However only little amounts of current is produced hence the need for a mechanism that can amplify the radio waves to produce a reasonable amount of electricity. Hence a method was devised to convert electricity from a machine to radio wave energy that was then harvested by the receiver to produced electricity. This method yielded a sufficient amount of electricity to power a small device.